



COMMONWEALTH OF AUSTRALIA

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PATENT SPECIFICATION

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Complete Specification

entitled (54) JACKING DEVICE FOR A MOVABLE PARTITION WALL.

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Convention Priority (30) -

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Related Art (56)	239, 217(52, 393/59)	81.3; 74.5
	232, 607(37, 322/58)	81.3
	208, 169(8226/55)	81.3

The following statement is a full description of this invention, including the best method of performing it known
to us:
12688/70

102-1D-21/5/70-10P. C.

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The present invention relates to a jacking device inserted in a movable partition wall consisting of a frame with parallel spaced-apart cover plates thereon.

Known jacking devices have hexagonal stretching screws throughout, which are turned with screw spanners and for this purpose must be accessible from the outside. A covered fitting for the jacking device is, therefore, not possible.

A jacking device inserted between the two cover plates of a frame and not visible from the outside consists, according to the present invention of a cylindrical sleeve vertically mounted in the frame, a screw-threaded spindle axially displaceable in the sleeve and a bevel geared nut rotatably mounted on one end of the sleeve and screw threaded to mate with the spindle and cause it to move axially without turning, said geared nut being turnable by a handle having a gear to mesh with the bevel geared nut, said handle being arranged to pass through an opening in one of the cover plates. The sleeve may, in this case, be provided with a collar on which the bevel geared nut rests.

The invention will be further described by way of example with reference to the accompanying drawings, in which :-

Fig. 1 shows a movable partition wall in section incorporating the jacking device according to the present invention, and

Fig. 2 shows, in perspective, a sheet metal bracket forming part of the device.

Referring to Fig. 1, a movable partition wall has a frame comprising a wooden framework 10 and parallel spaced apart cover plates 11 and 12 fixed thereto. The

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partition wall is arranged to be mounted on synthetic plastic ledges 13, 14, running along the floor which are inserted in recesses formed between the lower wood frame 10 and the cover plates 11 and 12. At the top of the partition wall a pressure-exerting block 15 is movable between the cover plates and the spaces left between the faces of the block and the plates are filled by foam rubber seals 16. A further foam rubber seal 17 is disposed within a groove which extends longitudinally of the block 15 in the uppermost surface thereof. The block 15, when the partition wall is in the desired position, is pressed upwards towards a ceiling in the direction of the arrow (Fig. 1) by a jacking device and the wall is thereby wedged between the floor and the ceiling.

The jacking device itself comprises a vertically disposed cylindrical sleeve 18 with a collar 18', a screw-threaded spindle 19 axially displaceable in the sleeve, and a bevel geared nut 20 resting on the collar 18' for screwing the spindle 19. In order to prevent the spindle 19 from turning in the sleeve 18, a pin 21 is riveted in the wall of the sleeve and projects into a longitudinal groove 19' in the spindle 19.

The nut 20 is provided with a bevel gear tooth system 20' on its surface which lies adjacent the collar 18'. In the bevel gear system a bevel gear 22 engages with a turn handle 23, which is

passed through an opening in the cover plate 11. A plug 23' on the gear wheel 22 engages in a suitable hole in the collar 18' of the guiding sleeve 18 and serves to locate the gear wheel in engagement with the toothed surface 20' during turning of gear 22 by the handle 23.

The spindle 19 with the nut 20 and the guiding sleeve 18, with the collar 18' are held together by a U-shaped sheet metal clamp 24, which spans the nut 20, the collar 18' of the sleeve 18 and a ^{washer-like} plate 25. The part of the spindle 19 projecting through the nut 20 thereby engages in a cut-out 24' and the sleeve 18 below the collar 18' engages in a cut-out 24" one in each of the arms of the U-shaped clamp respectively (Fig.2). The nut 20 is thus ensured against axial displacement.

Operation of the jacking device is effected by turning the handle 23, and the nut 20 thereby causing axial displacement of the spindle 19 guided in the sleeve 18 in the direction of the arrow.

When the movable partition wall is sufficiently braced, i.e. when it is wedged in position, the handle 23 is removed and taken out of the opening in the cover plate 11. The opening can then be closed by a synthetic plastic stopper (not shown) which is fitted in and toned in colour with the wall so that the jacking device is not visible from outside.

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The claims defining the invention are as follows :

1. A jacking device in a movable partition wall having a frame with parallel spaced-apart cover plates thereon, comprising a cylindrical sleeve vertically mounted in the frame and inserted between the cover plates, a screw-threaded spindle axially displaceable in the sleeve and a bevel geared nut rotatably mounted on one end of the sleeve and screw threaded to mate with the spindle and cause it to move axially without turning, said geared nut being turnable by a handle having a gear to mesh with the bevel geared nut, said handle being arranged to pass through an opening in one of the cover plates. (3rd February, 1966)
2. A device as claimed in claim 1, in which the sleeve is provided with a collar, on which the bevel geared nut rests. (3rd February, 1966)
3. A device as claimed in claim 1 or 2, in which the collar is provided below the bevel geared nut with a hole in which a central guiding pin of the handle is located when the gear on the handle meshes with the bevel geared nut. (3rd February, 1966)
4. A device as claimed in claim 1, 2 or 3 in which a U-shaped clamp is provided which spans the bevel geared nut and the collar of the sleeve, having cut-out sections in its arms in which the part of the spindle projecting above the bevel geared nut and the sleeve below the collar engage, whereby the bevel geared nut is prevented from being axially displaced. (3rd February, 1966)
5. A jacking device embodied in a movable partition wall, substantially as hereinbefore described with reference to and as illustrated in Figs. 1 and 2 of the accompanying drawings. (3rd February, 1966)

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D A T E D this 16th day of March, 1970.

CHRISTIAN HOLZAEPFEL JR.
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Fig. 1

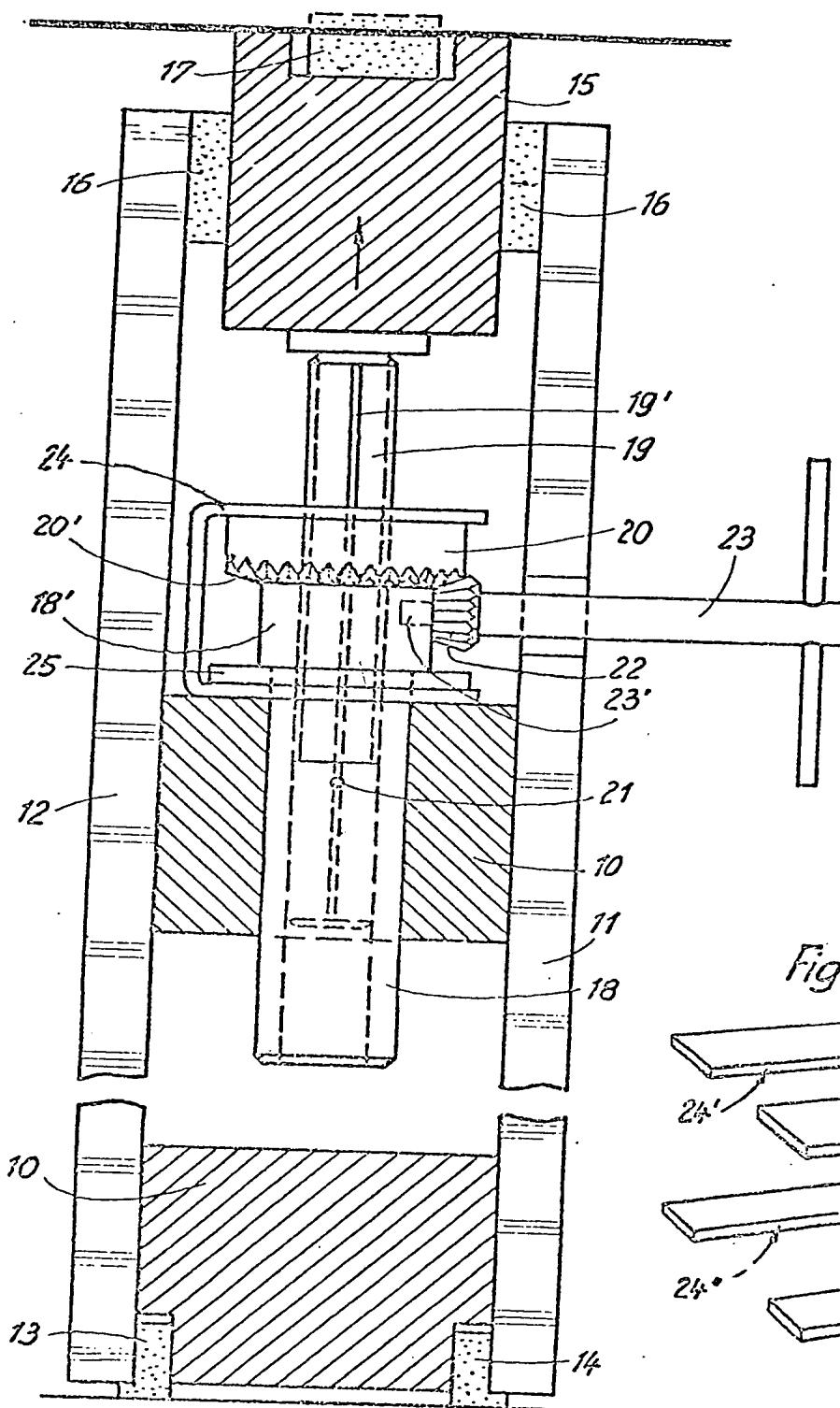
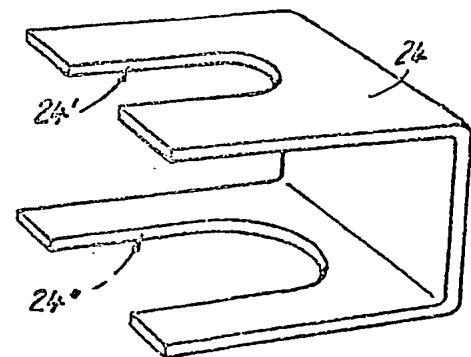


Fig. 2



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